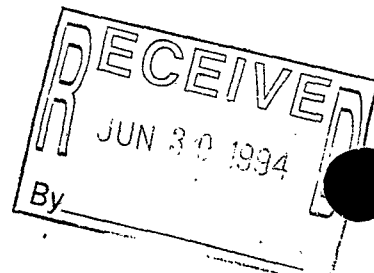




STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
715 GRANTHAM LANE
NEW CASTLE, DELAWARE 19720-4801

WASTE MANAGEMENT SECTION
SUPERFUND BRANCH

TELEPHONE: (302) 323-4540
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June 22, 1994

Mr. Randy Sturgeon (3HW42)
US EPA Region III
841 Chestnut Building
Philadelphia, PA 19107

RE: Procedures for establishing a Ground Water Management Zone at
Dover Gas Light Superfund Site

Dear Mr. Sturgeon:

I am writing in response to your request for a description of the practice of establishing groundwater management zones (GMZs) in Delaware and the application of the procedure to the Dover Gas Light Site.

GMZs have been established at several Delaware NPL sites including Wildcat Landfill and New Castle Spill. There is not a single instance on the record of violation of a GMZ. Theoretically, a violation could occur in one of two ways: (1) drilling of an unpermitted well by a licensed or unlicensed driller, and (2) accidentally issuing a permit for a well in the GMZ. I will attempt to describe for you the procedures that effectively prevent both types of violations.

Under regulations issued by the Division of Water Resources (DWR), a water supply well or monitoring well must receive a permit prior to installation. The permit application describes the location and purpose of the well, its construction details and is submitted by the driller. Only applications from licensed drillers are considered for approval. The licensing process includes review of the driller's qualifications and knowledge of regulations.

The enforcement branches of the Department are authorized to inspect drilling activities including a check for permits and licenses. The most effective policing however is performed by the licensed drillers themselves. Licensed water well drilling is a lucrative business in Delaware. Those who have obtained the proper credentials are always on the look out for unlicensed drillers operating in the state. Drilling by unlicensed drillers is virtually unknown. A licensed driller who drills without a permit stands to lose the license.

Delaware's good nature depends on you!

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It has been our experience that licensed drillers simply will not drill without a permit even when state and EPA officials are on the scene telling them they do not need it (as on a Superfund site). They stand to lose too much by jeopardizing their relationship with the licensing authority. Consequently, there has been excellent compliance with the licensing and permitting regulations during their twenty plus years of existence.

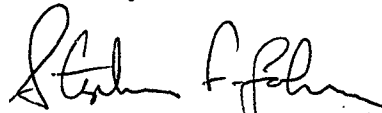
If the chance of an unpermitted well going into a GMZ is small, what about the possibility of DWR unknowingly issuing a permit for such a well?

The Superfund Branch and the DWR work closely together on ground water issues. When the need for a GMZ is recognized by the Superfund Branch, a description and map of the subject area is sent from the Branch to the DWR with a Memorandum of Understanding stipulating the conditions of the GMZ. The memorandum is signed by both division directors. The GMZ is then depicted on a map in the well permitting section of the DWR. If there are any questions about the exact location of the well, the DWR calls the Superfund Branch. In fact, this is not the only geographic control over well placement. This map also shows the public utility monopoly zones. By regulation, no new private supply wells are permitted in zones served by a public water utility.

In the case of the Dover Gas Light Site, the GMZ will be included in the City of Dover water utility monopoly zone and is therefore redundant. However, as at other NPL sites, the Department will establish a stand alone GMZ as a formal institutional control separate from the monopoly protection provisions of the regulations.

If you have any questions regarding this matter, please call me at 302-323-4540.

Sincerely,



Stephen F. Johnson
Environmental Engineer
Superfund Branch

SFJ:dmg:SFJ94028

cc: John Barndt, Well Permits
Stephen N. Williams

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